SAKAMATA: A tool to avoid whale strandings

F.P.A Benders, S.P. Beerens and W.C. Verboom

TNO Physics and Electronics Laboratory,
P.O. Box 96864, 2509 JG The Hague,
The Netherlands
E-mail: frank.benders@tno.nl

Abstract

World-wide a concern exists about the influence of man-made noise on marine life, and particularly of high power sonar. Most concern lies with marine mammals that use acoustics for hunting, communication and/or navigation. This concern is fed by recent strandings of whales that could be related to military sonar transmissions and seismic explorations. Especially sonars that use audible frequencies are harmful for these mammals. However, little is known about the exact influence of active sonar on marine mammals and therefore many countries apply the *precautionary principle*. In practice this means that mitigation measures are defined for the use of active sonars. Implementation of such mitigation measures is no sinecure. Background knowledge (presence of mammal species and their hearing sensitivity and behaviour, acoustic conditions) is often lacking. Therefore historical and *in situ* information must be used. TNO-FEL has developed SAKAMATA, a tool that supports the implementation of mitigation measures in an effective way.